



**PATENT**  
**Docket No.: M4065.0724/P724**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Kristy A. Campbell

Filed: July 21, 2003 Examiner: M. Landau

**For: IMPROVED PERFORMANCE  
PCRAM CELL**

**Assistant Commissioner for Patents  
Washington, D.C. 20231**

**DECLARATION OF JOHN T. MOORE UNDER**  
**37 CFR 1.132**

Dear Sir:

I, John T. Moore, declare and state as follows:

1. I am of legal age, and under no disability that prevents me from attesting to the following statements and information, which are based on my personal knowledge and observations or on my best information and belief.
2. I am a joint inventor of U.S. Patent No. 6,813,178 (the "'178 patent"), filed on March 12, 2003, as evidenced by the attached Declaration (Exhibit A).
3. Kristy A. Campbell is also a joint inventor of the '178 patent, as evidenced by the attached Declaration (Exhibit A).

4. Micron Technology Inc. ("Micron"), is the assignee of the '178 patent. (See Assignment and Agreement attached as Exhibit B.)

5. I reviewed and understand the '178 patent including the specification and drawings. I am specifically familiar with Figure 1b of the '178 patent, which shows a chalcogenide glass constant current device. The device shown in Figure 1b has the following stack structure from bottom to top: a substrate; a bottom electrode; a first chalcogenide glass layer; a metal containing layer; a silver layer; a second chalcogenide glass layer; and a second electrode. The '178 patent also discloses that the structure shown in Figure 1b can be used for a memory device.

6. I am also familiar with presently pending U.S. Patent Application No. 10/622,482 including the currently pending claims (the "'482 application"). It is my understanding that Kristy A. Campbell conceived of the invention described in the '482 application including the currently pending claims and amendments prior to March 12, 2003, as evidenced by Exhibit C, which is a Micron Invention Disclosure document. The actual date of Exhibit C has been blanked out, as has any description not relevant to the conception of the Claimed Invention; however, the date is prior to March 12, 2003.

7. Exhibit C was the basis for the '482 application and shows that Kristy A. Campbell alone conceived of a memory device having the following layered stack structure: chalcogenide glass; metal-chalcogenide; silver; chalcogenide glass; and top

electrode. Thus, Exhibit C shows that Kristy A. Campbell alone conceived of a memory device having the structure shown in Figure 1b of the '178 patent prior to the filing date of the '178 patent. The invention as claimed in the '178 patent directed to constant current devices, structures and systems followed Kristy A. Campbell's conception of the structure shown in Figure 1b as a memory device.

All statements made herein of my own knowledge are true, and all statements made on information and belief are believed to be true. All statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the above-identified patent.

Date: 10-26-2005

By:



John T. Moore